What is claimed is:

1.	A system for collection and storage of traffic data, system comprising:

a first point of presence in a computer network, the first point of presence comprising at least one network element;

a storage device remote from the first point of presence; and

a first processor operative to collect traffic data from the at least one network element in the first point of presence, analyze the collected traffic data, and transmit a result of the analysis to the storage device.

2.	The invention of Claim 1, wherein the first processor is operative to predict traffic demands based on the collected traffic data and transmit the predicted traffic demands to the storage device.

3.	The invention of Claim 1, wherein the first processor is operative to perform at least one of the following analyses: generating statistical summaries of the collected traffic data, compressing the collected traffic data, filtering the collected traffic data, performing unit conversion on the collected traffic data, summarizing the collected traffic data, performing statistics synthesis on the collected traffic data, performing a missing value calculation on the collected traffic data, and scheduling when the collected traffic data should be transmitted to the storage device.

4.	The invention of Claim 1, wherein a number of bytes required to transmit the result of the analysis from the first processor to the storage device is less than a number of bytes required to transmit the collected traffic data from the first processor to the storage device.

5.	The invention of Claim 1 further comprising a second processor operative to analyze the results stored in the storage device.

6.   The invention of Claim 5, wherein the second processor is operative to determine traffic demands of the computer network based on the results stored in the storage device and is further operative to automatically direct data in the computer network based on the determined traffic demands.

7.   The invention of Claim 6, wherein the first processor is operative to configure the at least one network element to automatically direct data based on the determined traffic demands.

8.   The invention of Claim 1, wherein the first processor is operative to configure the at least one network element to collect the traffic data.

9.   The invention of Claim 1 further comprising a second processor operative to collect the results stored in the storage device, analyze the collected results, and transmit the results of the analysis of the collected results to a second storage device.

10.   The invention of Claim 1 further comprising an additional processor operative to collect traffic data from an additional network element in the first point of presence, analyze the collected traffic data from the additional network element, and transmit a result of the analysis of the collected traffic data from the additional network element to the storage device.

11.   The invention of Claim 1, wherein the first processor is further operative to collect traffic data from at least one network element in a second point of presence, analyze the collected traffic data from the at least one network element in the second point of presence, and transmit a result of the analysis of the collected traffic data from the at least one network element in the second point of presence to the storage device.

12.　The invention of Claim 1, wherein the at least one network element comprises a plurality of network elements, and wherein the first processor is further operative to collect traffic data from each of the plurality of network elements.

13.　The invention of Claim 1, wherein the first processor is integrated with a network element of the at least one network element.

14.　The invention of Claim 1, wherein the first processor is located in the first point of presence.

15.　The invention of Claim 1, wherein the first processor is located external to the first point of presence.

16.　The invention of Claim 1 further comprising:

a second point of presence in the computer network, the second point of presence being remote from the storage device and comprising at least one network element; and

a second processor operative to collect traffic data from the at least one network element in the second point of presence, analyze the collected traffic data from the at least one network element in the second point of presence, and transmit a result of the analysis of the collected traffic data from the at least one network element in the second point of presence to the storage device.

17.　The invention of Claim 16 further comprising a third processor operative to analyze the results transmitted to the storage device from the first and second processors.

18.　The system of Claim 17, wherein the third processor is operative to determine traffic demands of the computer network based on the results from the first and second

processors stored in the storage device and is further operative to automatically direct data in the computer network based on the determined traffic demands.

19.   A method for collection and storage of traffic data, the method comprising:

(a)   collecting traffic data from at least one network element in a first point of presence in a computer network;

(b)   analyzing the collected traffic data; and

(c)   transmitting a result of the analysis to a storage device remote from the first point of presence.

20.   The invention of Claim 19, wherein (b) comprises predicting traffic demands based on the collected traffic data, and wherein (c) comprises transmitting the predicted traffic demands to the storage device.

21.   The invention of Claim 19, wherein (b) comprises at least one of the following: generating statistical summaries of the collected traffic data, compressing the collected traffic data, filtering the collected traffic data, performing unit conversion on the collected traffic data, summarizing the collected traffic data, performing statistics synthesis on the collected traffic data, performing a missing value calculation on the collected traffic data, and scheduling when the collected traffic data should be transmitted to the storage device.

22.   The invention of Claim 19, wherein a number of bytes required to transmit the result of the analysis to the storage device is less than a number of bytes required to transmit the collected traffic data to the storage device.

23.   The invention of Claim 19 further comprising:

(d)   analyzing the results stored in the storage device.

24.   The invention of Claim 23, wherein (d) comprises determining traffic demands of the computer network based on the results stored in the storage device, and wherein the invention further comprises automatically directing data in the computer network based on the determined traffic demands.

25.   The invention of Claim 24 further comprising configuring the at least one network element to automatically direct data based on the determined traffic demands.

26.   The invention of Claim 19 further comprising configuring the at least one network element to collect the traffic data.

27.   The invention of Claim 19 further comprising collecting the results stored in the storage device, analyzing the collected results, and transmiting the results of the analysis of the collected results to a second storage device.

28.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor, and wherein the invention further comprises, with a second processor:

collecting traffic data from an additional network element in the first point of presence;

analyzing the collected traffic data from the additional network element; and

transmitting a result of the analysis of the collected traffic data from the additional network element to the storage device.

29.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor, and wherein the invention further comprises, with the first processor:

collecting traffic data from at least one network element in a second point of presence;

analyzing the collected traffic data from the at least one network element in the second point of presence; and

transmitting a result of the analysis of the collected traffic data from the at least one network element in the second point of presence to the storage device.

30.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor, wherein the at least one network element comprises a plurality of network elements, and wherein the invention further comprises collecting traffic data from each of the plurality of network elements with the first processor.

31.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor integrated with a network element of the at least one network element.

32.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor located in the first point of presence.

33.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor located external to the first point of presence.

34.   The invention of Claim 19, wherein (a)-(c) are performed with a first processor, and wherein the invention further comprises, with a second processor:

        (d)   collecting traffic data from at least one network element in a second point of presence in the computer network, the second point of presence being remote from the storage device;

        (e)   analyzing the traffic data collected in (d); and

        (f)   transmitting a result of the analysis performed in (e) to the storage device.

35.   The invention of Claim 34 further comprising:

        (g)   analyzing the results transmitted to the storage device from the first and second processors.

36.   The invention of Claim 35, wherein (g) comprises determining traffic demands of the computer network based on the results from the first and second processors stored in the storage device, and wherein the invention further comprises automatically directing data in the computer network based on the determined traffic demands.

37.   A system for collection and storage of traffic data, the system comprising:

a first point of presence in a computer network, the first point of presence comprising at least one network element;

a second point of presence in the computer network, the second point of presence comprising at least one network element;

a storage device remote from the first and second points of presence;

a first processor operative to collect traffic data from the at least one network element in the first point of presence, analyze the collected traffic data from the at least one network element in the first point of presence, and transmit a result of the analysis of the collected traffic data from the at least one network element in the first point of presence to the storage device;

a second processor operative to collect traffic data from the at least one network element in the second point of presence, analyze the collected traffic data from the at least one network element in the second point of presence, and transmit a result of the analysis of the collected traffic data from the at least one network element in the second point of presence to the storage device; and

a third processor operative to analyze the results transmitted to the storage device from the first and second processors.

38.   The invention of Claim 37, wherein the third processor is operative to determine traffic demands of the computer network based on the results from the first and second processors stored in the storage device and is further operative to automatically direct data in the computer network based on the determined traffic demands.

39.   The invention of Claim 37, wherein at least one of the first and second processors is operative to predict traffic demands based on the collected traffic data and transmit the predicted traffic demands to the storage device.

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40.   A system for collection and storage of traffic data, the system comprising:

means for collecting traffic data from at least one network element in a first point of presence in a computer network;

means for analyzing the collected traffic data; and

means for transmitting a result of the analysis to a storage device remote from the first point of presence.